AutoPi TMU SocketCAN

Faster data rate at your fingertips

Bluetooth

Raspberry Pi 3 Model A+ and Up

Security Element

HDMI Port

*USB Port

Voice Speaker

Accelerometer/ Gyroscope

2x Dedicated CAN and DoIP

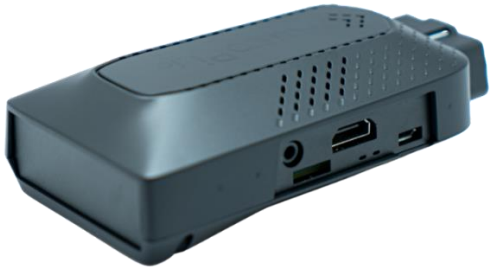
GPS/GLONASS

4G/3G LTE Cat 4 Modem

*Available with RPi 3b+ and up

WiFi

Native Real-time Clock



Key Benefits

4G/LTE with global coverage
The integrated modem with worldwide coverage.

Built in 2x CAN interface
Automotive connection with dual CAN.

Factory integrated unit or aftermarket add-on
Use as a factory integrated OEM device or aftermarket add-on.

Integrated power-safe functionality
Proven and experienced power fail-safe functionality integrated.

Runs full Linux OS
Boost a well proved and tested OS, with guarantee for stability.

Can be extended to almost any usage
Allows extension to both business and personal use cases.

Upgradeable CPU/RAM
Upgrade the device to Raspberry Pi 3B+ or Raspberry Pi 4.

Automotive certified (CE/FCC)
Certified to automotive standards for global usage.

Upgraded automotive interface
The device comes with a 2x CAN interface and can be further expanded with additional CAN interfaces. Support for Diagnostics over IP (DoIP) using Raspberry Pi 3B+ and up

Runs LINUX OS
AutoPi Core is based on a full LINUX OS (Raspberry Pi OS), with endless possibilities for extensions and integrations. Well proven and tested OS, with high endurance.

Open source-software
The device runs on an open source-software, which allows users to build a custom code on top of that. All drivers and implementations in AutoPi Core is available from our GitHub repository.

Computing Power
Quad Core CPU provides incredible speed and functionality. Broadcom BCM2837B0 64-bit Quad-core CPU at 1.4 GHz. 512MB RAM and also an integrated GPU. Upgradeable to even more speed with Raspberry Pi 4.

Standard
Suited for all Raspberry Pi editions

1x ext. ant., 2x USB-A
Suited for Raspberry Pi 3B+ and up

2x ext. antenna
Suited for Raspberry Pi 3B+ and up

1x ethernet, 2x USB-A
Suited for Raspberry Pi 3B+ and up

3x external antenna
Suited for Raspberry Pi 3A+

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Technical Specifications

Processor	Broadcom BCM2837B0, Cortex-A53 (ARMv8), 64-bit quad-core SoC @ 1.4 GHz (built-in Raspberry Pi 3 model A+) **Upgrade (RPi3 B+):** Broadcom BCM2837B0 quad-core A53 (ARMv8) 64-bit @ 1.4GHz **Upgrade (RPi4 B):** Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
Memory	512MB LPDDR2 SDRAM (built-in Raspberry Pi 3 model A+) **Upgrade (RPi3 B+):** 1GB LPDDR2 SDRAM **Upgrade (RPi4 B):** 2GB, 4GB or 8GB LPDDR4-3200 SDRAM (depending on model)
Storage	32GB Micro SD Card High Endurance Class 10 UHS-1 (Raspbian Jessie OS and AutoPi Core software installed) **(Upgradeable to 128GB)**
Size, Weight and Casing (NEW)	**Size and weight:** TBD **Casing:** Improved expansion options with exchangeable back shield for external antennas, additional USB ports, ethernet port.
Modem	Integrated 4G/LTE Cat 4 connection (3G/EDGE fallback) 150Mbit DL / 50Mbit UL Worldwide support in a single device **4G LTE Bands (Global):** B1 / B2 / B3 / B4 / B5 / B7 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B26 / B28 / B38 / B39 / B40 / B41 **3G Fallback (WCDMA):** B1 / B2 / B4 / B5 / B6 / B8 / B19 **EDGE Fallback:** B2 / B3 / B5 / B8 / Quad-band
Certifications	EN 301 489-1 v2.2.0, EN55025:2008, EN 50498 and Directive 2004/104/EC, ISO 7637-2:2011, EN 301 489-3 V2.1.1, FCC 47 CFR Part 15, Class A:10–1–17 Edition
Security Element (NEW)	- Hardware Based Secure Key Management - Public Key Algorithms: ECDSA: FIPS186-3, NIST Standard P256, B283 and K283 - Secure Storage of Keys, Certificates and Data - Unique Serial Number - Intrusion Detection
GPS	Integrated GPS + A-GPS. **Supports:** GPS/GLONASS/BeiDou/Galileo/QZSS
Power	**Line Voltage:** 12.5V AC (Car battery power). Up to 35V (Trucks). Support for trucks with up to 35V Built-in Power Management system to prevent the vehicle's battery from being drained
Expansion	**2 X USB:** Available when using Raspberry Pi 3B+ and up **GPIO:** UART/I2C/SPI
Wireless	Built on Cypress CYW43455 Chipset **WiFi:** 2.4GHz and 5GHz IEEE 802.11.b/g/n/ac wireless LAN **Bluetooth:** Bluetooth 4.2 + Bluetooth Low Energy (BLE)
Accelerometer	Built in 3-axis accelerometer
Gyroscope (NEW)	Built in 3-axis gyroscope
Automotive Interface (NEW)	**2 X CAN:** CAN interface with up to 1Mbps Data rate with integrated CAN data filter **DoIP:** Built in support for DoIP using RPi3 B+ and up
Input slots	**SD Card:** Included (See storage) **SIM Card:** Nano SIM – *Not Included*
Audio	Built-in speakers Mini Jack out (audio)
Video Out	HDMI @ 1080P60 Video Output
Absolute Maximum Operating Environment	**Operating Temperature:** -20° TO 70° C (-4° TO 158° F) **Relative Humidity:** 0% TO 75% Noncondensing
Operating System	Raspbian OS with preconfigured AutoPi Core
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